

#### Response to a Bioterrorism Event

Bioterrorism Preparedness & Response Program BPRP/NCID/CDC

#### LRN Vision

- Establish an integrated multilevel laboratory network to provide rapid & critical laboratory capacity for response to:
  - bioterrorism
  - emerging infectious diseases
  - other public health threats & emergencies
- Includes both biological & chemical labs

#### LRN Partners

- Clinical Labs
- State & Local Public Health Labs
- Military Labs
- Veterinary Labs
- Agricultural, Water & Food-Testing Labs
- APHL & ASM
- FDA, NIH, & International Labs
- FBI, DoD, DOE, USDA, EPA

#### LRN Collaboration

- APHL/CDC Cooperative Agreement for Emergency Preparedness & Response
- BT Laboratory Response Working Group
  - NCID, NCEH, IRMO, PHPPO, ATSDR, NIOSH
- LRN Partnership Working Group
  - APHL, CDC, FBI, DoD, ASM, State PH Health Labs
- NEDSS Operational Working Group
- CIC IT Security Working Group

## Initial Classification of LRN Laboratories

D - High level characterization (seek evidence of molecular chimeras) and secure banking of isolates

Level D Lab BSL-4 Safety & proficiency to probe for universe of bio- and chemical agents in non-clinical specimen

Level C Lab BSL-3 C - Safety and proficiency sufficient to probe, type, perform toxigenicity testing

B - Safety and proficiency adequate to confirm & characterize susceptibility

Level B Lab
Work at BSL-3 with BT agents

Level-A Labs - Assess Risks for Aerosols and Use Biosafety Cabinet

A - Adequate safety to rule-out and forward organisms

#### Current LRN Membership

National Labs CDC and USAMRIID

Reference Labs (confirmatory testing)

Formerly Level B/C

**Sentinel Labs** 

(recognize, rule-out, refer)

Formerly Level A

### Scope of LRN National Labs

Current LRN Level D labs = 2 (CDC & USAMRIID)

LRN Level B, C & D labs

Projected LRN Level C & Level B labs = **250** nationally

Possible LRN Level A "state-registered" labs > **2,500** nationally (4414 are Level A capable)

LRN Level A labs

#### Provided to Each LRN Lab

- Agent-Specific Protocols
- Standardized Reagents & Controls
- Lab Referral Directory
- Secure Communications & ELR
- Training & Technology Transfer
- Proficiency Testing
- Appropriate Vaccinations for Lab Workers

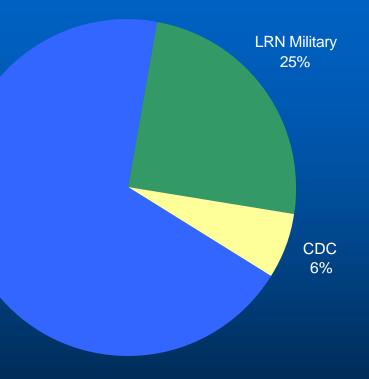
### Local Response Works

LRN Response to Oct-Dec 2001 Anthrax Events:

DoD inclusive (25%) **30,200** environmental workups performed

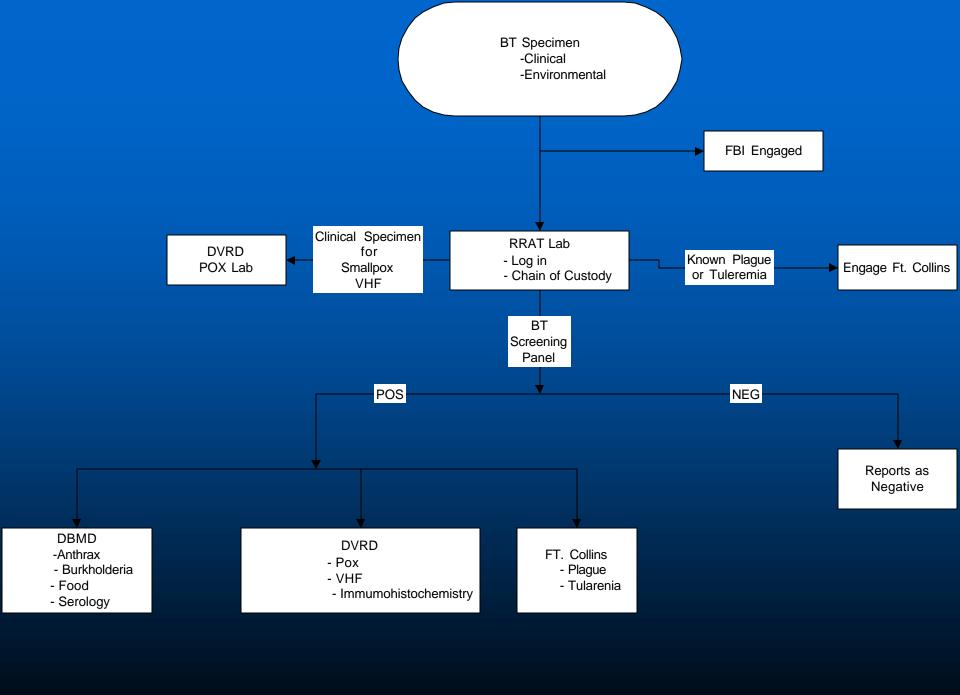
- + CDC inclusive (6%) **7,500** environmental workups
- + PHL inclusive (69%) **84,010** environmental workups





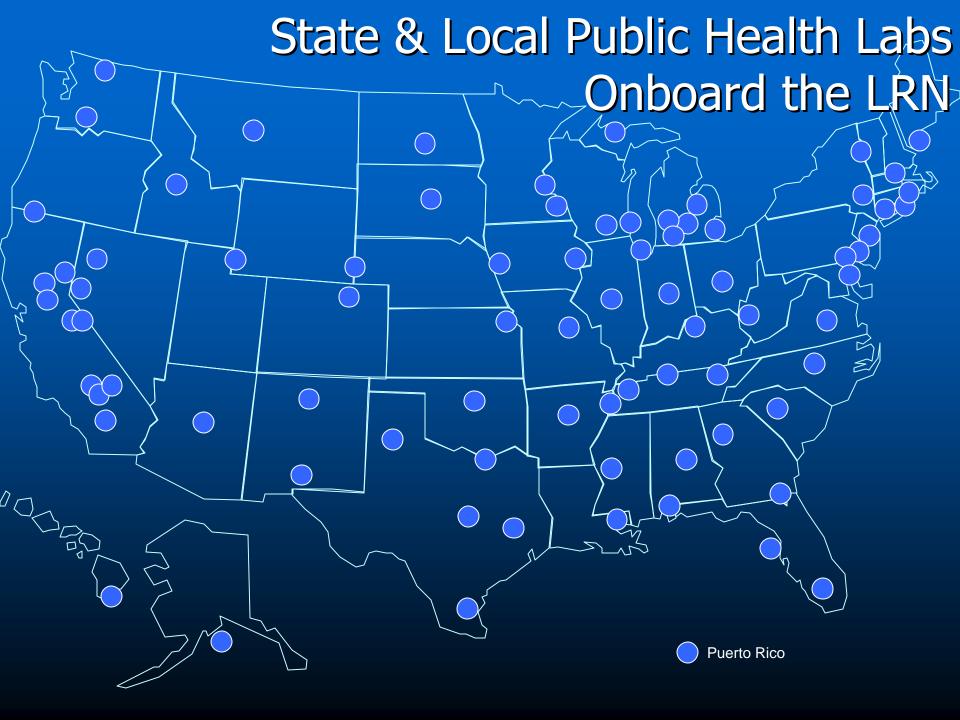
#### Total:

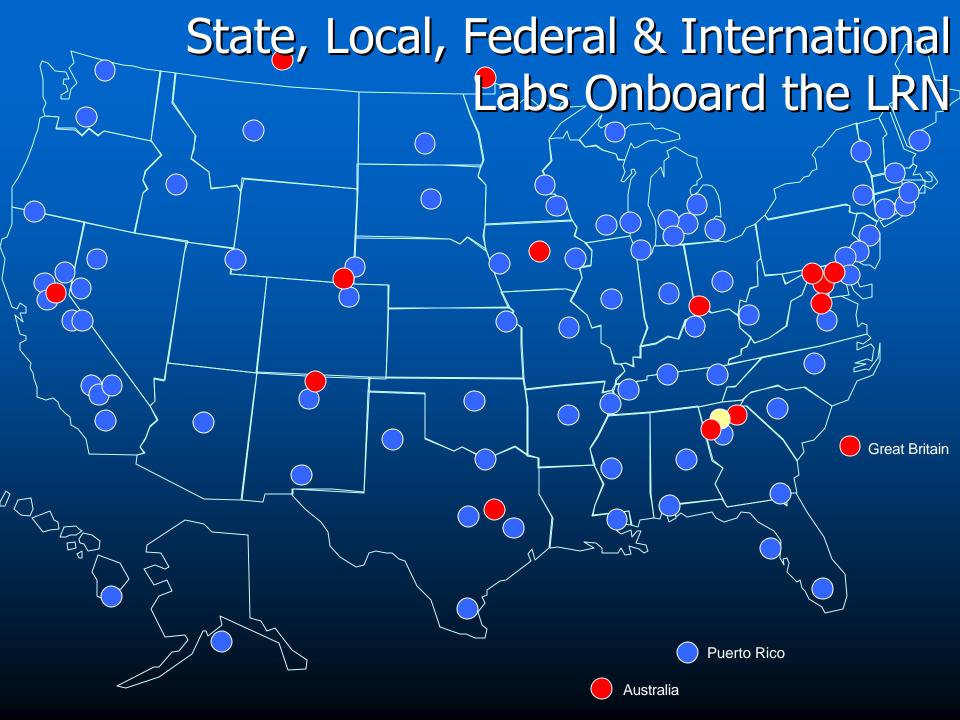
>121,710 environmental workups

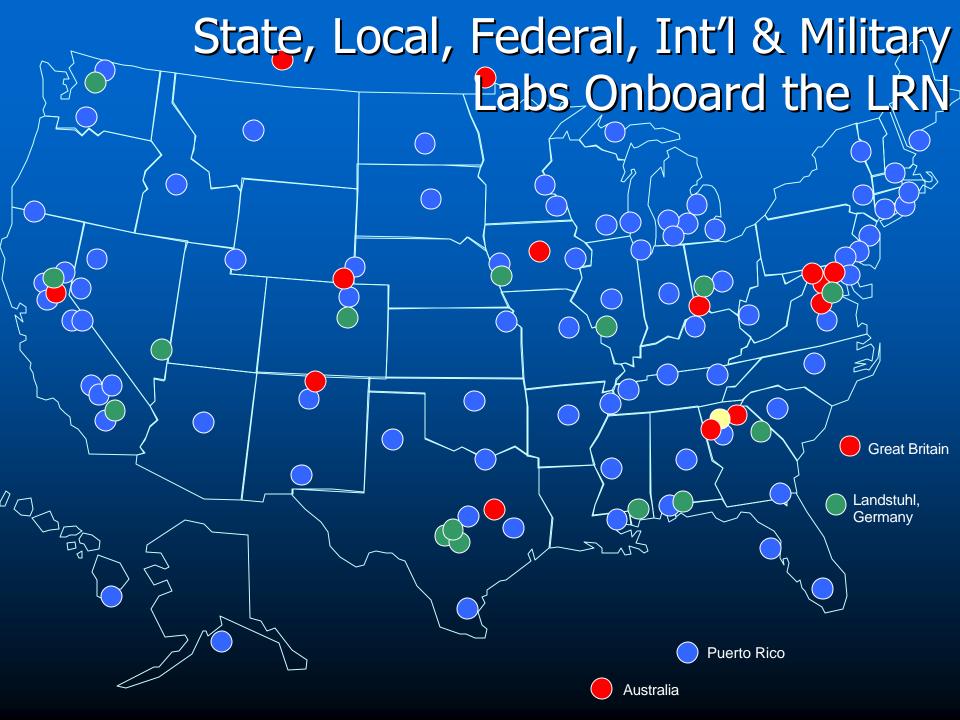


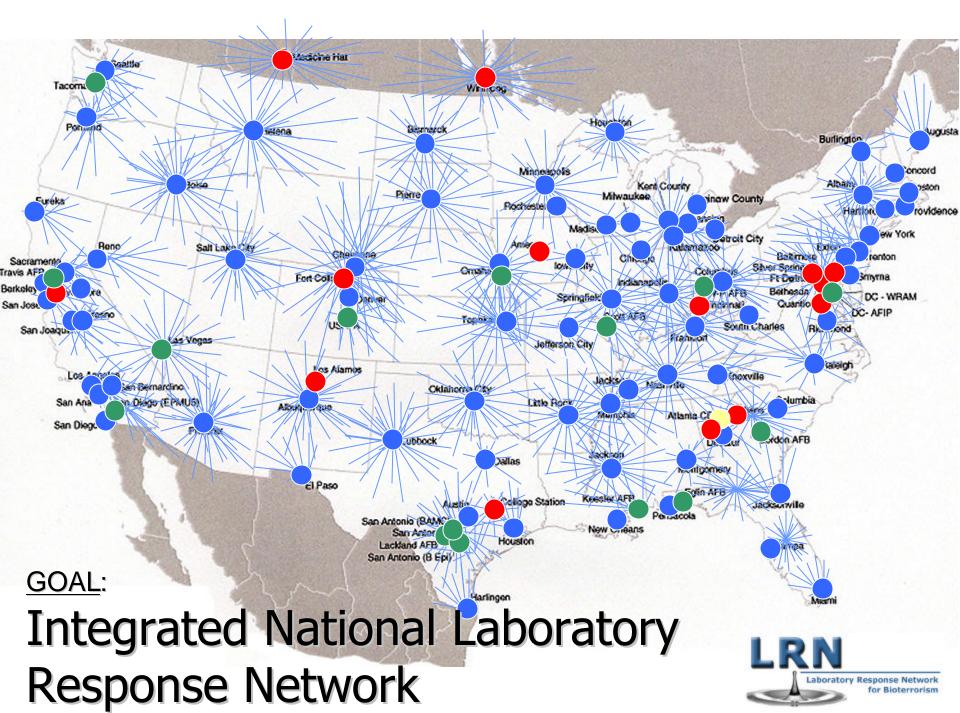
#### LRN Future Goals

- Additional agents & testing methods
- FDA compliance & GMP
- Electronic specimen tracking & ELR
- Integration w/ Epi & EOC Response plans
- Expanded proficiency testing & training
- Registry of Level A labs
- Completing an LRN Charter based on a mature network









# J. Michael Miller, Ph.D., (D)ABMM Chief, Laboratory Response Branch Bioterrorism Preparedness and Response Program NCID, CDC